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Publication date:
2009

Document Version
Publisher's PDF, also known as Version of record

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Cyclodextrins are normally considered as small cyclic molecules that, due to a relatively hydrophobic inner cavity, are capable of forming complexes with usually small organic molecules. The only commercially available cyclodextrins (and their derivatives) are made from macrocycles consisting of 6, 7 or 8 glucose units, respectively. These are known as the α-, β-, and γ-cyclodextrin. However, it is possible to produce cyclodextrins with more glucose units pr. macrocycle. Although, these cyclodextrine may have a degree of polymerization ranging from 9 to several hundreds, they are collectively known as the large-ring cyclodextrins. An overview of the production, purification, structure, properties and possible applications of this highly diverse group of molecules will be given.